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C413M-E (7/99) EH4007/EH4010/EH4014/EH4018 Camera Enclosure

IMPORTANT SAFEGUARDS AND WARNINGS

Prior to installation and use of this product, the following WARNINGS should be observed.

1. Installation and servicing should only be done by qualified service personnel and conform to all local codes.
2. Unless the unit is specifically marked as a NEMA Type 3, 3R, 3S, 4, 4X, 6 or 6P enclosure, it is designed for indoor use only and it must not be installed where exposed to rain and moisture.
3. Only use replacement parts recommended by Pelco.
4. The installation method and materials should be capable of supporting four times the weight of the enclosure, pan/tilt, camera and lens combination.

The product and/or manual may bear the following marks:



This symbol indicates that dangerous voltage constituting a risk of electric shock is present within this unit.



This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.

CAUTION:

RISK OF ELECTRIC SHOCK.
DO NOT OPEN.

Please thoroughly familiarize yourself with the information in this manual prior to installation and operation.

DESCRIPTION

The EH4007, EH4010, EH4014, and EH4018 are low-cost camera enclosures designed for use with solid-state CCD-type cameras in indoor environments. These enclosures are easy to install and service. The removable rear cap provides easy access to the slide-out camera sled on which the camera is mounted and has adjustable glands that make installing the power and video cables easy. The removable front cap lets you manually adjust the lens without removing the camera.

The EH4007 is primarily designed for vertical-format CCD-type cameras and includes a ceiling-mount bracket. The EH4010 is designed for 1/2-inch format cameras and can be used in fixed-mount applications or mounted to a light-duty pan/tilt. The EH4014 and EH4018 are designed for 2/3-inch format cameras with fixed focal length or motorized lenses.

Models

EH4007	7-inch camera enclosure
EH4010	10-inch camera enclosure
EH4014	14-inch camera enclosure
EH4018	18-inch camera enclosure

INSTALLATION

The following parts are supplied:

EH4007	
1	7-inch camera enclosure

To attach camera to sled:
1 3/8-inch Phillips screw

EH4010/EH4014/EH4018	
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1	Camera enclosure
1	Parts bag
2	Glands

To attach camera to sled:
1 3/8-inch Phillips screw

To mount enclosure:
2 1/2-inch hex screws
2 Flat washers
2 Split lock washers

EH4007 Installation

1. Remove the two Phillips screws from the rear cap and remove the rear cap from the enclosure.
2. Loosen the hex screw securing the camera sled in place, pull out the sled assembly, and remove it from the rail.
3. Attach the mounting bracket to the mounting surface.

You may want to remove the mounting bracket from the enclosure body so that you have enough room to mount the bracket. If you remove the mounting bracket from the enclosure body, mount the bracket and reattach the enclosure body to the bracket.

Partially tighten the mounting-bracket screw and the screws that attach the mounting bracket to the enclosure body. Leave enough movement so that you can later adjust the pan and tilt of the enclosure.
4. If the camera lens is adjustable, extend the lens to its maximum length.
5. Attach the camera and lens to the L-shaped bracket with the screw provided.
6. Reinstall the camera sled in the enclosure.
7. Verify that the camera is adjusted with the lens a minimum of 1/2 inch from the enclosure window. If necessary, remove the sled, reposition the L-shaped bracket on the sled to adjust the distance between the camera and enclosure window, and replace the sled. Do not tighten the screw that secures the sled to the enclosure yet.
8. Pull the video and power cables through the glands on the rear cap. Refer to Table A for the type of video coaxial cable to use. For 24 VAC power, refer to Table B to determine the size of wire to use.
9. Attach the cables to the camera.
10. Readjust the camera and lens so they are a minimum of 1/2 inch from the enclosure window and tighten the hex screw that holds the sled in place.
11. Reinstall the rear cap.
12. Replace the two Phillips screws and tighten.
13. Adjust the glands for a tight fit around the cables.
14. If necessary, adjust the camera focus and iris. If you need to adjust the focus and iris manually, remove the front cover, adjust the focus and iris, and replace the front cover.
15. Adjust the pan and tilt of the enclosure and completely tighten the mounting-bracket screw and the screws that attach the mounting bracket to the enclosure body.

EH4010/EH4014/EH4018 Installation

1. Remove the two Phillips screws from the rear cap, and remove the rear cap and attached camera sled from the enclosure.
2. Attach the enclosure body to the appropriate mount (if applicable) using the instructions provided with the mount.

For installations where no additional mount is used, attach the enclosure to the mounting surface with the recommended hardware.
3. Attach the glands to the rear cap.
4. Pull the video and power cables through the glands. Refer to Table A for the type of video coaxial cable to use. For 24 VAC power, refer to Table B to determine the size of wire to use.
5. Attach the cables to the camera.
6. If the camera lens is adjustable, extend the lens to its maximum length.
7. With the screw provided, attach the camera and lens to the sled so that the fully-extended lens is aligned with the front edge of the sled.
8. Reinstall the rear cap and sled, and replace the two Phillips screws and tighten.

9. Adjust the glands for a tight fit around the cables.
10. Adjust the camera focus and iris if necessary. If you need to adjust the focus and iris manually, remove the front cover, adjust the focus and iris, and replace the front cover.
11. Adjust the pan and tilt of the mount, if applicable.

Table A. Video Coaxial Cable Wiring Distances

Cable Type*	Maximum Distance
RG59/U	750 ft (229 m)
RG6/U	1,000 ft (305 m)
RG11/U	1,500 ft (457 m)

* Minimum cable requirements:
 75 ohms impedance
 All-copper center conductor
 All-copper braided shield with 95% braid coverage

Table B. 24 VAC Wiring Distances

The following are the recommended maximum distances for 24 VAC applications and are calculated with a 10-percent voltage drop. (Ten percent is generally the maximum allowable voltage drop for AC-powered devices.)

EXAMPLE: An enclosure that requires 80 vA and is installed 35 feet (10 m) from the transformer would require a minimum wire gauge of 20 AWG.

NOTE: Distances are calculated in feet; values in parentheses are meters.

		Wire Gauge					
		20	18	16	14	12	10
Total vA consumed	10	283 (86)	451 (137)	716 (218)	1,142 (348)	1,811 (551)	2,880 (877)
	20	141 (42)	225 (68)	358 (109)	571 (174)	905 (275)	1,440 (438)
	30	94 (28)	150 (45)	238 (72)	380 (115)	603 (183)	960 (292)
	40	70 (21)	112 (34)	179 (54)	285 (86)	452 (137)	720 (219)
	50	56 (17)	90 (27)	143 (43)	228 (69)	362 (110)	576 (175)
	60	47 (14)	75 (22)	119 (36)	190 (57)	301 (91)	480 (146)
	70	40 (12)	64 (19)	102 (31)	163 (49)	258 (78)	411 (125)
	80	35 (10)	56 (17)	89 (27)	142 (43)	226 (68)	360 (109)
	90	31 (9)	50 (15)	79 (24)	126 (38)	201 (61)	320 (97)
	100	28 (8)	45 (13)	71 (21)	114 (34)	181 (55)	288 (87)
	110	25 (7)	41 (12)	65 (19)	103 (31)	164 (49)	261 (79)
	120	23 (7)	37 (11)	59 (17)	95 (28)	150 (45)	240 (73)
	130	21 (6)	34 (10)	55 (16)	87 (26)	139 (42)	221 (67)
	140	20 (6)	32 (9)	51 (15)	81 (24)	129 (39)	205 (62)
	150	18 (5)	30 (9)	47 (14)	76 (23)	120 (36)	192 (58)
	160	17 (5)	28 (8)	44 (13)	71 (21)	113 (34)	180 (54)
	170	16 (4)	26 (7)	42 (12)	67 (20)	106 (32)	169 (51)
	180	15 (4)	25 (7)	39 (11)	63 (19)	100 (30)	160 (48)
	190	14 (4)	23 (7)	37 (11)	60 (18)	95 (28)	151 (46)
	200	14 (4)	22 (6)	35 (10)	57 (17)	90 (27)	144 (43)
		Maximum distance from transformer to load					

MAINTENANCE

Regularly scheduled maintenance prolongs the operational life and appearance of the equipment.

Clean the window regularly with a mild, nonabrasive detergent in water and a soft cloth to maintain picture clarity.

Service Manual

If you need to repair the camera enclosure, obtain a service manual in one of the following ways:

- Go to Pelco's web site at <ftp://www.pelco.com> and find service manual C413SM.
- Call Pelco's DataFax service at 1-559-292-0435 and request document number 24138.
- Contact Pelco's Literature Department and request service manual C413SM.

SPECIFICATIONS

Camera Mounting

EH4007: Adjustable L-shaped bracket with one mounting hole attached to the slide-out camera sled

EH4010/
EH4014/

EH4018: Adjustable camera sled

Viewing

Window: .125 in. (3.17 mm) thick, Lexan®, optically clear, UV stabilized, impact-resistant (UL 94HB rated)

Viewing Area

EH4007: 3.75 in. H x 2.50 in. W
(9.52 x 6.35 cm)

EH4010/
EH4014/

EH4018: 2.50 in. H x 3.75 in. W
(6.35 x 9.52 cm)

Cable Entry: Two compression glands on rear end cap

Recommended Camera Size

EH4007: 4.25 in. H x 3.00 in. W x 5.00 in. L
(10.79 x 7.62 x 12.70 cm)

EH4010: 3.50 in. H x 5.25 in. W x 8.00 in. L
(8.89 x 13.33 x 20.32 cm)

EH4014: 3.50 in. H x 5.25 in. W x 12.00 in. L
(8.89 x 13.33 x 30.48 cm)

EH4018: 3.50 in. H x 5.25 in. W x 16.00 in. L
(8.89 x 13.33 x 40.64 cm)

Construction: Extruded aluminum body, injection molded ABS end cap

Finish: Gray polyester powder coat

Dimensions

EH4007: 8.00 in. H x 4.40 in. W x 8.70 in. L
(20.32 x 11.18 x 22.19 cm)

EH4010: 4.45 in. H x 6.20 in. W x 11.70 in. L
(11.30 x 15.75 x 29.72 cm)

EH4014: 4.45 in. H x 6.20 in. W x 15.75 in. L
(11.30 x 15.75 x 40.01 cm)

EH4018: 4.45 in. H x 6.20 in. W x 19.75 in. L
(11.30 x 15.75 x 50.17 cm)

Weight

EH4007: 2.75 lb (1.25 kg)

EH4010: 3.50 lb (1.59 kg)

EH4014: 4.95 lb (2.25 kg)

EH4018: 5.81 lb (2.64 kg)

(Design and product specifications subject to change without notice.)

WARRANTY AND RETURN INFORMATION

WARRANTY

Pelco will repair or replace, without charge, any merchandise proved defective in material or workmanship for a period of one year after the date of shipment. Exceptions to this warranty are as noted below:

- Three years on Genex™ Series (multiplexers, server, and keyboard).
- Two years on all standard motorized and fixed focal length lenses.
- Two years on Esprit™, Legacy®, Intercept®, PV1000 Series, CM6700/CM8500/CM9500/CM9750/CM9760 Matrix, Spectra®, DF5 Series and DF8 Fixed Dome products.
- Two years on WW5700 series window wiper (excluding wiper blades).
- Two years on cameras.
- Six months on all pan and tilts, scanners or preset lenses used in continuous motion applications (that is, preset scan, tour and auto scan modes).

Pelco will warrant all replacement parts and repairs for 90 days from the date of Pelco shipment. All goods requiring warranty repair shall be sent freight prepaid to Pelco, Clovis, California. Repairs made necessary by reason of misuse, alteration, normal wear, or accident are not covered under this warranty.

Pelco assumes no risk and shall be subject to no liability for damages or loss resulting from the specific use or application made of the Products. Pelco's liability for any claim, whether based on breach of contract, negligence, infringement of any rights of any party or product liability, relating to the Products shall not exceed the price paid by the Dealer to Pelco for such Products. In no event will Pelco be liable for any special, incidental or consequential damages (including loss of use, loss of profit and claims of third parties) however caused, whether by the negligence of Pelco or otherwise.

The above warranty provides the Dealer with specific legal rights. The Dealer may also have additional rights, which are subject to variation from state to state.

If a warranty repair is required, the Dealer must contact Pelco at (800) 289-9100 or (559) 292-1981 to obtain a Repair Authorization number (RA), and provide the following information:

1. Model and serial number
2. Date of shipment, P.O. number, Sales Order number, or Pelco invoice number
3. Details of the defect or problem

If there is a dispute regarding the warranty of a product which does not fall under the warranty conditions stated above, please include a written explanation with the product when returned.

Ship freight prepaid to: Pelco
300 West Pontiac Way
Clovis, CA 93612-5699

Method of return shipment shall be the same or equal to the method by which the item was received by Pelco.

RETURNS

In order to expedite parts returned to the factory for repair or credit, please call the factory at (800) 289-9100 or (559) 292-1981 to obtain an authorization number (CA number if returned for credit, and RA number if returned for repair). Goods returned for repair or credit should be clearly identified with the assigned CA/RA number and freight should be prepaid. All merchandise returned for credit may be subject to a 20% restocking and refurbishing charge.

Ship freight prepaid to: Pelco
300 West Pontiac Way
Clovis, CA 93612-5699

REVISION HISTORY

Manual #	Date	Comments
C413M	7/87	Original manual.
C413M	9/90	Rev. A. Added Sections 1.1 and 2.2. Added models with brass, chrome and copper plating. Revised Figures 1, 2 and 5.
C413M	11/91	Rev. B. Replaced EM1400 Series of mounts with EM2400 Series for mounts with brass, chrome and copper plating.
C413M-C	10/96	Rev. C. Enclosure was limited to indoor use only. References to heater and sun shroud removed. Removed models with brass, chrome and copper plating. Updated manual to new format.
C413M-D	5/99	Rev. D. Added certifications. Corrected installation instructions. Corrected specifications. Moved exploded assembly diagrams and parts lists to new maintenance/service manual (C413SM).
C413M-E	7/99	Rev. E. Added models EH4014 and EH4018 to manual.